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Notice of Allowability	Application No.	Applicant(s)	
	10/687,552	MOLLOV ET AL.	
	Examiner	Art Unit	
	Faye Polyzos	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 13 June 2005.
2. ☒ The allowed claim(s) is/are 1-50.
3. ☒ The drawings filed on 15 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>6/13/05, 4/9/04</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

Comment on Submissions

1. This communication is responsive to submissions 13 June 2005.

Allowable Subject Matter

2. Claims 1-50 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claim 1, the prior art does not disclose or fairly suggest a radiation projection detector for generating signals in response to a radiation beam wherein the access circuit is configured to collect signals simultaneously from two or more of the lines of detector elements and maintain the collected signals separated from each other to allow the signals to be individually processed.

The examiner notes that while it is known in the art for a radiation projection detector to collect signals from two or more lines of detector elements combining the collected signals (see for example *Tanigawa et al.* -- US 6,707,876 B2 -- at Figs. 11 and col. 12, lines 34-39 and 55-59), the prior art does not fairly suggest collecting signals and maintaining the signals separately from each other to allow for the signals to be individually processed.

Regarding independent claim 5, the prior art does not disclose or fairly suggest a radiation projection detector comprising of a second imager and further configured to collect signals from multiple lines of the detector elements of the second imager simultaneously.

The examiner notes that while it is known in the art for a radiation projection detector comprise data collecting means for converting channel combined signals for each group into projection data for each channel and collecting the projection data along the channel arrangement direction (see for example *Tanigawa et al.* -- US 6,707,876 B2 -- at Figs. 3 and col. 3, lines 66-67 and col. 4, lines 1-2), the prior art does not fairly suggest of multiple imagers or an access circuit to collect signals from the multiple imagers simultaneously.

Regarding independent claim 11, the prior art does not disclose or fairly suggest a radiation projection detector apparatus for generating signals in response to a radiation beam where the detector comprises an imager having an arrangement where the photoconductor layer is aligned with the detector array to generate charge in response to a radiation and therefore, the detector array generates a signal in response to the charge received from the photoconductor layer.

The examiner notes that while it is known in the art for a radiation projection detector comprise data collecting means for converting channel combined signals for each group into projection data for each channel and collecting the projection data along the channel arrangement direction (see for example *Tanigawa et al.* -- US 6,707,876 B2 -- at Figs. 3 and col. 3, lines 66-67 and col. 4, lines 1-2), the prior art does not fairly suggest of an arrangement where the photoconductor layer is aligned with the detector array to generate a signal in response to the photoconductor layer.

Regarding independent claim 21, the prior art does not disclose or fairly suggest a radiation projection detector apparatus for generating signals in response to a

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radiation beam where the detector comprises a plurality of imager and an access circuit configured to collect signals from the first and second imager simultaneously.

The examiner notes that while it is known in the art for a radiation projection detector comprise data collecting means for converting channel combined signals for each group into projection data for each channel and collecting the projection data along the channel arrangement direction (see for example *Tanigawa et al.* -- US 6,707,876 B2 -- at Figs. 3 and col. 3, lines 66-67 and col. 4, lines 1-2), the prior art does not fairly suggest of multiple imagers or an access circuit to collect signals from the multiple imagers simultaneously.

Regarding independent claims 32,36 and 40, the prior art does not disclose or fairly suggest a method, system or computer readable medium for collecting signals from a detector, the detector having a plurality of image elements, each of which having a transistor gate to send a control signal to select transistor gate for two or more image elements from which signals are to be collected and to simultaneously pass the signals from the image element lines to charge amplifiers coupled to the image elements.

The examiner notes that while it is known in the art for a radiation projection detector to comprise transistors and the number of currents to be distributed can be increase by increasing the number of transistors (see for example *Tanigawa et al.* -- US 6,707,876 B2 -- col. 10, lines 37-44), the prior art does not fairly suggest of sending a control signal to select transistor gates for two or more image elements to collect signals or to simultaneously pass signals from the two or more image elements to charge amplifiers that which are coupled to the image elements as disclosed supra.

Regarding independent claims 41,49 and 50, the prior art does not disclose or fairly suggest a method, system or computer readable medium for collecting signals from a detector, the detector comprising a plurality of imagers where each imager comprises a plurality of lines of image elements and where the system comprises a means collecting signals from the imagers and simultaneously passing the signals on each of the plurality of imagers to charge the amplifier.

The examiner notes that while it is known in the art for a radiation projection detector to comprise a conventional data collecting section comprising a switch unit to combine the channel detected signal currents across the detector rows and a data collecting unit to generate a series of projection data (see for example *Tanigawa et al.* - *US 6,707,876 B2* – Fig. 1 (Prior Art) and col. 2, lines 36-42), the prior art does not fairly suggest of a system for collecting signals and to pass signals of a plurality of imagers simultaneously.

The remaining claims 2-4, 6-10, 12-20, 22-31, 33-35, 37-39 and 42-49 are allowable based on their dependency.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Polyzos whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FP



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